activity. All samples were in triplicate, the error bars represent standard errors of the mean (SEM) for three separate experiments. --

Please replace the paragraph beginning on page 15, line 24, with the following rewritten paragraph:

-- None of the aforementioned regulatable expression systems exhibit all the features of an effective regulatable gene expression system. The TetR system lacks pharmacokinetics necessary for a tightly controlled system. In addition, systems such as TetR are not applicable to agricultural applications, in that it is not practical for an inducer (*i.e.* tetracycline) to be sprayed on an entire field of plants. --

In the Claims:

Please amend claims 1, 11, 14, 18, 23-26 and 29-30 as follows:

1. (Amended) A molecular switch, comprising:
a first nucleic acid construct having

(i) a DNA response element for a transcriptional regulatory protein operably linked to a first promoter;

(ii) a non-native compound binding sequence which is the same as, overlapping, or adjacent to said DNA response element for binding to a DNA binding compound;

(iii) a transgene under the control of said first promoter; and
the DNA binding compound.

11. (Amended) A molecular switch, comprising:
a first nucleic acid construct having

(i) a DNA response element for a transcriptional regulatory protein operably linked to a regulatable promoter;

(ii) a non-native compound binding sequence which is the same as, overlapping, or adjacent to said transcriptional regulatory protein DNA response element for binding to a DNA binding compound;

(iii) a transgene and the coding sequence for a transcriptional regulatory protein under the control of said regulatable promoter; and

the DNA binding compound.

14. (Amended) The molecular switch according to claim 1 or 11, wherein compound binding sequence has about 8 to 20 nucleotides.

18. (Amended) A method of producing a cell having a molecular switch for modulating gene expression, said method comprising:

(i) transforming said cell with a nucleic acid construct having a DNA response element which binds a transcriptional regulatory protein operably linked to a promoter, a non-native compound-binding sequence which is the same as, overlapping, or adjacent to said DNA response element for binding to a DNA binding compound, a transgene under the control of the promoter; and

(ii) exposing said transformed cell to a DNA binding compound,

wherein binding of the DNA binding compound to said compound binding sequence is effective to inhibit binding of a transcriptional regulatory protein to the DNA response element, thereby derepressing or deactivating expression of the gene, where the transcriptional regulatory protein is a repressor or activator protein, respectively.

23. (Amended) The molecular switch according to claim 1 or 11, wherein said DNA response element binds a transcriptional regulatory protein which comprises an activator domain selected from the group consisting of VP16, NF-κB, Gal4, TFE3, ITF1, Oct-1, Sp1, Oct-2, NFY-A, ITF2, c-myc, and CTF.

24. (Amended) The cell according to claim 16, wherein the DNA response element binds a transcriptional regulatory protein which comprises an activator selected from the group consisting of VP16, NF-κB, Gal4, TFE3, ITF1, Oct-1, Sp1, Oct-2, NFY-A, ITF2, c-myc, and CTF.

25. (Amended) The molecular switch according to claim 1 or 11 wherein the DNA response element binds a transcriptional regulatory protein which comprises a repressor selected from the group consisting of Kruppel (KRAB), kox-1, TetR, even-skipped, LacR, engrailed, hairy (HES), Groucho (TLE), RING1, SSB16, SSB24, Tup1, Nab1, AREB, E4BP4, HoxA7, EBNA3, Mad and v-erbA.